

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computing device comprising:

a processor; and

a data nullification device for nullifying at least a part of target data recorded on a recording medium, the target data being made up of a plurality of data blocks, the data nullification device comprising:

a first judging unit operable to judge, for each data block of the target data, whether the data block needs to be nullified;

a sequential nullifying unit operable to destroy only a part of a data block judged as needing to be nullified, the part including data necessary to utilize remaining parts of the data block;

a processing capacity judging unit operable to judge whether the data nullification device has a processing capacity sufficient to destroy all data which is judged as needing to be nullified; and

a total nullifying unit operable to destroy data which is included in the data block judged as needing to be nullified and is not destroyed by the sequential nullifying unit, ~~only~~ when the processing capacity judging unit judges that the data nullification device has the sufficient processing capacity.

2. (Currently Amended) The ~~data nullification~~ computing device of Claim 1,

wherein the recording medium stores sequence information that shows a sequence in which the plurality of data blocks were recorded onto the recording medium, and

wherein said first judging unit judges, in succession, the plurality of data blocks in the sequence shown by the sequence information, as needing to be nullified.

3. (Canceled)

4. (Currently Amended) The ~~data nullification~~ computing device of Claim 1,
wherein each data block has a length corresponding to a fixed transmission time period,
and
wherein a specified number of recording areas which are each used as a recording area of
a data block are reserved on the recording medium.

5-6. (Canceled)

7. (Currently Amended) The ~~data nullification~~ computing device of Claim 2, wherein
the data nullification device further comprising comprises:

a utilizing unit operable to utilize the target data recorded on the recording medium, in
units of data blocks,

wherein said first judging unit further judges that each data block which was utilized by
said utilizing unit needs to be nullified.

8. (Currently Amended) The ~~data nullification~~ computing device of Claim 7,

wherein the target data is content data which is transmitted from an external device and recorded on the recording medium,

wherein the content data is accompanied with copy control information showing whether copying of the content data is permitted or prohibited,

wherein said utilizing unit reproduces the content data recorded on the recording medium, in units of data blocks, and

wherein, only if the copy control information accompanying the content data shows that the copying of the content data is prohibited, said first judging unit judges that each data block which was reproduced by said utilizing unit needs to be nullified.

9. (Currently Amended) The ~~data nullification~~ computing device of Claim 1,

wherein the recording medium stores time limit information showing a recording time limit of each data block recorded on the recording medium, the recording time limit being a time limit after which retention of the data block on the recording medium is prohibited,

wherein said first judging unit judges that each data block whose recording time limit is reached needs to be nullified, based on the time limit information.

10. (Currently Amended) The ~~data nullification~~ computing device of Claim 9, wherein the data nullification device further comprising comprises:

a utilizing unit operable to utilize the target data recorded on the recording medium, in units of data blocks,

wherein said first judging unit further judges that each data block which was utilized by the utilizing unit needs to be nullified.

11. (Currently Amended) The ~~data nullification~~ computing device of Claim 10, wherein the target data is content data which is transmitted from an external device and recorded on the recording medium, wherein the content data is accompanied with copy control information showing whether copying of the content data is permitted or prohibited, wherein said utilizing unit reproduces the content data recorded on the recording medium, in units of data blocks, and wherein, only if the copy control information accompanying the content data shows that the copying of the content data is prohibited, said first judging unit judges that each data block which was reproduced by the utilizing unit needs to be nullified.

12. (Currently Amended) The ~~data nullification~~ computing device of Claim 1, wherein the data nullification device further comprising comprises:

a utilizing unit operable to utilize the target data recorded on the recording medium, in units of data blocks,

wherein said first judging unit judges that each data block which was utilized by the utilizing unit needs to be nullified.

13. (Currently Amended) The ~~data nullification~~ computing device of Claim 12,

wherein the target data is content data which is transmitted from an external device and recorded on the recording medium,

wherein the content data is accompanied with copy control information showing whether copying of the content data is permitted or prohibited,

wherein said utilizing unit reproduces the content data recorded on the recording medium, in units of data blocks, and

wherein, only if the copy control information accompanying the content data shows that the copying of the content data is prohibited, said first judging unit judges that each data block which was reproduced by the utilizing unit needs to be nullified.

14. (Currently Amended) The ~~data nullification~~ computing device of Claim 12,

wherein the target data is accompanied with copy control information showing whether copying of the target data is permitted or prohibited,

wherein said utilizing unit records the target data recorded on the recording medium, to another recording medium, in units of data blocks, and

wherein, only if the copy control information accompanying the target data shows that the copying of the target data is prohibited, said first judging unit judges that each data block on the recording medium which was recorded by the utilizing unit needs to be nullified.

15-16. (Canceled)

17. (Currently Amended) The ~~data nullification~~ computing device of Claim 1,

wherein the target data is MPEG data including I pictures, and
wherein the part of the data block necessary to utilize the remaining parts of the data
block is an I picture.

18. (Currently Amended) The ~~data nullification~~ computing device of Claim 1,
wherein the target data is MPEG data including I pictures, and
wherein the part of the data block necessary to utilize the remaining parts of the data
block is a first sector of an I picture.

19-21. (Canceled)

22. (Currently Amended) The ~~data nullification~~ computing device of Claim 1,
wherein each data block recorded on the recording medium has been encrypted using an
individual encryption key,

wherein a decryption key for decrypting the encrypted data block is stored on the
recording medium, and

wherein said sequential nullifying unit destroys at least a decryption key corresponding to
a data block which is judged as needing to be nullified.

23. (Currently Amended) The ~~data nullification~~ computing device of Claim 22, wherein
the data nullification device further comprising comprises:

an acquiring unit operable to acquire the target data in an encoded form;

a decoding unit operable to decode the encoded target data using a user key which has been provided to authorized users in advance, to obtain the target data;

a key generating unit operable to generate an arbitrary encryption key and a decryption key corresponding to the encryption key, for each data block of the target data;

a data encrypting unit operable to encrypt the data block using the encryption key so that the encrypted data block can be decrypted using the corresponding decryption key;

a key encrypting unit operable to encrypt the decryption key using an identifier unique to the data nullification device; and

a recording unit operable to record the encrypted data block and the encrypted decryption key onto the recording medium.

24. (Currently Amended) The ~~data nullification~~ computing device of Claim 23, wherein at least said decoding unit, said key generating unit, said data encrypting unit, and said key encrypting unit are contained in a single semiconductor chip.

25. (Currently Amended) A data nullification program embodied on a computer readable medium for nullifying at least a part of target data recorded on a recording medium, the target data being made up of a plurality of data blocks, the data nullification program causing a computer to execute a method comprising:

a first judging step of judging, for each data block of the target data, whether the data block needs to be nullified;

a sequential nullifying step of destroying only a part of a data block judged as needing to be nullified, the part including data necessary to utilize remaining parts of the data block;

a second judging step of judging whether a sufficient processing capacity exists to destroy all data which is judged as needing to be nullified; and

a total nullifying step of destroying data which is included in the data block judged as needing to be nullified and is not destroyed in said sequential nullifying step, ~~only~~ when said second judging step judges that there is sufficient processing capacity to destroy all data which is judged as needing to be nullified.

26. (Previously Presented) The data nullification program of Claim 25,
wherein the recording medium stores sequence information that shows a sequence in which the plurality of data blocks were recorded onto the recording medium, and
wherein the first judging step judges, in succession, the plurality of data blocks in the sequence shown by the sequence information, as needing to be nullified.

27. (Canceled)

28. (Previously Presented) The data nullification program of Claim 26, wherein the method executed by the computer further comprises:

a utilizing step of utilizing the target data recorded on the recording medium, in units of data blocks,

wherein the first judging step further judges that each data block which was utilized in the utilizing step needs to be nullified.

29. (Previously Presented) The data nullification program of Claim 25,

wherein the recording medium stores time limit information showing a recording time limit of each data block recorded on the recording medium, the recording time limit being a time limit after which retention of the data block on the recording medium is prohibited,

wherein the first judging step judges that each data block whose recording time limit is reached needs to be nullified, based on the time limit information.

30. (Previously Presented) The data nullification program of Claim 29, wherein the method executed by the computer further comprises:

a utilizing step of utilizing the target data recorded on the recording medium, in units of data blocks,

wherein the first judging step further judges that each data block which was utilized in the utilizing step needs to be nullified.

31. (Previously Presented) The data nullification program of Claim 25, wherein the method executed by the computer further comprises:

a utilizing step of utilizing the target data recorded on the recording medium, in units of data blocks,

wherein the first judging step judges that each data block which was utilized in the utilizing needs to be nullified.

32-33. (Canceled)

34. (Previously Presented) The data nullification program of Claim 25,
wherein each data block recorded on the recording medium has been encrypted using an individual encryption key,
wherein a decryption key for decrypting the encrypted data block is stored on the recording medium, and
wherein the sequential nullifying step destroys at least a decryption key corresponding to a data block which is judged as needing to be nullified.

35. (Currently Amended) A data nullification method for nullifying at least a part of target data recorded on a recording medium, the target data being made up of a plurality of data blocks, the data nullification method comprising:

a first judging step of judging, for each data block of the target data, whether the data block needs to be nullified;

a sequential nullifying step of destroying only a part of a data block judged as needing to be nullified, the part including data necessary to utilize remaining parts of the data block;

a second judging step of judging whether a sufficient processing capacity exists to destroy all data which is judged as needing to be nullified; and

a total nullifying step of destroying data which is included in the data block judged as needing to be nullified and is not destroyed in said sequential nullifying step, ~~only~~ when said second judging step judges that there is sufficient processing capacity to destroy all data which is judged as needing to be nullified.

36. (Previously Presented) The data nullification method of Claim 35,
wherein the recording medium stores sequence information that shows a sequence in which the plurality of data blocks were recorded onto the recording medium, and
wherein the first judging step judges, in succession, the plurality of data blocks in the sequence shown by the sequence information, as needing to be nullified.

37. (Canceled)

38. (Previously Presented) The data nullification method of Claim 36, further comprising:

a utilizing step of utilizing the target data recorded on the recording medium, in units of data blocks,

wherein the first judging step further judges that each data block which was utilized in the utilizing step needs to be nullified.

39. (Previously Presented) The data nullification method of Claim 35,

wherein the recording medium stores time limit information showing a recording time limit of each data block recorded on the recording medium, the recording time limit being a time limit after which retention of the data block on the recording medium is prohibited,

wherein the first judging step judges that each data block whose recording time limit is reached needs to be nullified, based on the time limit information.

40. (Previously Presented) The data nullification method of Claim 39, further comprising:

a utilizing step of utilizing the target data recorded on the recording medium, in units of data blocks,

wherein the first judging step further judges that each data block which was utilized in the utilizing step needs to be nullified.

41. (Previously Presented) The data nullification method of Claim 35, further comprising:

a utilizing step of utilizing the target data recorded on the recording medium, in units of data blocks,

wherein the first judging step judges that each data block which was utilized in the utilizing needs to be nullified.

42-43. (Canceled)

44. (Previously Presented) The data nullification method of Claim 35,
wherein each data block recorded on the recording medium has been encrypted using an individual encryption key,
wherein a decryption key for decrypting the encrypted data block is stored on the recording medium, and
wherein the sequential nullifying step destroys at least a decryption key corresponding to a data block which is judged as needing to be nullified.

45. (Canceled)

46. (New) The computing device of Claim 1,
wherein the target data is MPEG data including I pictures, B pictures and P pictures,
wherein the sequential nullifying unit is operable to destroy only a first sector of all of the I pictures regardless of the processing capacity of the data nullification device, and
wherein the total nullifying unit is operable to destroy all sectors of the I pictures other than the first sector, all sectors of the B pictures, and all sectors of the P pictures, when the processing capacity judging unit judges that the data nullification device has the sufficient processing capacity.

47. (New) The data nullification program of Claim 25,
wherein the target data is MPEG data including I pictures, B pictures and P pictures,

wherein the sequential nullifying step destroys only a first sector of all of the I pictures regardless of the processing capacity, and

wherein the total nullifying step destroys all sectors of the I pictures other than the first sector, all sectors of the B pictures, and all sectors of the P pictures, when the second judging step judges that there is sufficient processing capacity to destroy all data which is judged as needing to be nullified.

48. (New) The data nullification method of Claim 35,

wherein the target data is MPEG data including I pictures, B pictures and P pictures,

wherein the sequential nullifying step destroys only a first sector of all of the I pictures regardless of the processing capacity, and

wherein the total nullifying step destroys all sectors of the I pictures other than the first sector, all sectors of the B pictures, and all sectors of the P pictures, when the second judging step judges that there is sufficient processing capacity to destroy all data which is judged as needing to be nullified.